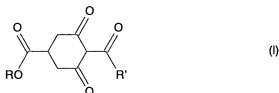


APPENDIX I:

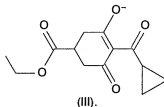
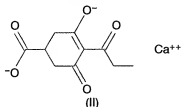
SUBSTITUTE LISTING OF THE CLAIMS:

1. (*previously presented*) A method of increasing and qualitatively modifying the content of flavonoids and phenolic constituents in a plant selected from grapevines, cherries, plums, sloes, blueberries, strawberries, citrus fruit, pawpaw, red cabbage, broccoli, Brussels sprouts, kale, carrots, parsley, celery/celeriac, onions, garlic, tea, coffee, cacao, maté, hops, soya, oilseed rape, *Aronia melanocarpa* or *Ginkgo biloba*, which comprises treating the plant with an acylcyclohexanedione of the formula I



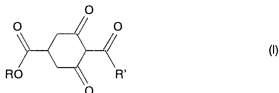
where R is hydrogen or C₁-C₆-alkyl and R' is C₁-C₆-alkyl or C₃-C₆-cycloalkyl, or with a suitable salt of I,
thereby giving the plant an increased and qualitatively modified content of flavonoids and phenolic constituents compared to an untreated plant

2. (*previously presented*) A method as claimed in claim 1, wherein the plant is treated with an acylcyclohexadione of the formula II and/or the formula III



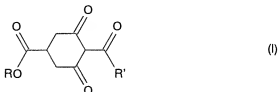
3. (*previously presented*) A method as claimed in claim 1, wherein the content of flavonoids and phenolic constituents of grapevines is increased and qualitatively modified.
4. (*previously presented*) A method as claimed in claim 1, wherein the content of flavonoids with an unsubstituted C atom in the 3-position, and of the oligomers and polymers of these flavonoids, is increased.
5. (*canceled*)

6. (*previously presented*) An extract, juice, wine or press cake comprising flavonoids and other phenolic constituents obtained from grapes of a red grapevine variety, the grapevine plant previously having been treated with at least one acylcyclohexanedione of the formula I



where R is hydrogen or C₁-C₆-alkyl and R' is C₁-C₆-alkyl or C₃-C₆-cycloalkyl, or with a suitable salt of I, such that the content of flavonoids and other phenolic constituents of the grapevine has been increased and qualitatively modified.

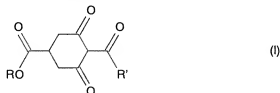
7. (*previously presented*) A composition for treating illnesses associated with human or animal health, health-promoting composition or tonic for humans and animals, or a cosmetic comprising the plant selected from grapevines, cherries, plums, sloes, blueberries, strawberries, citrus fruit, pawpaw, red cabbage, broccoli, Brussels sprouts, kale, carrots, parsley, celery/celeriac, onions, garlic, tea, coffee, cacao, maté, hops, soya, oilseed rape, oats, wheat, rye, *Aronia melanocarpa* or *Ginkgo biloba* or a part of the plant or a product prepared with the plant selected from juices, teas, extracts, fermentation products and fermentation residues, wherein said plant has been treated with the acylcyclohexanedione of the formula I



where R is hydrogen or C₁-C₆-alkyl and R' is C₁-C₆-alkyl or C₃-C₆-cycloalkyl, or with a suitable salt of I.

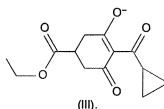
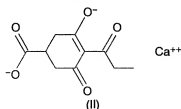
8. (*canceled*)
9. (*previously presented*) A method as claimed in claim 1, wherein the plant is a grapevine.
10. (*previously presented*) A method for producing a plant preparation with an increased and qualitatively modified content of flavonoids and phenolic constituents, which method comprises

- (1) treating a plant selected from from grapevines, cherries, plums, sloes, blueberries, strawberries, citrus fruit, paw-paw, red cabbage, broccoli, Brussels sprouts, kale, carrots, parsley, celery/celeriac, onions, garlic, tea, coffee, cacao, maté, hops, soya, oilseed rape, *Aronia melanocarpa* or *Ginkgo biloba*, with an acylcyclohexanedione of formula I



where R is hydrogen or C₁-C₆-alkyl and R' is C₁-C₆-alkyl or C₃-C₆-cycloalkyl, or with a suitable salt of I; and

- (2) harvesting and processing the plant or parts of the plant to obtain a plant preparation which has an increased and qualitatively modified content of flavonoids and phenolic constituents.
11. (previously presented) The method as claimed in claim 10, wherein the plant is treated in step (1) with an acylcyclohexanedione of formula II and/or formula III



12. (previously presented) The method as claimed in claim 10, where a plant preparation with an increased content of flavonoids with an unsubstituted C-atom in the 3-position, and of the oligomers and polymers of these flavonoids, is obtained.
13. (canceled)
14. (previously presented) The method as claimed in claim 10, wherein the plant is a grapevine.
15. (previously presented) The composition or tonic as claimed in claim 7, wherein, after having been treated with the acylcyclohexanedione, the plant or parts of the plant have been harvested and processed to obtain said composition or tonic.